A very pretty phasmid: *Parectatosoma hystrix*.

J. Roget, 11, Rue Louis Aragon, 59290 Roost Warendin, France.
Translated by Margaret Day from *Le Monde des Phasmes, 19: 13-15.*

Key words
Phasmida, *Parectatosoma hystrix*, Madagascar, Rearing, Breeding.

Classification

This species was first described from Madagascar in 1879 by Wood-Mason who placed it in his new genus *Parectatosoma*. The genus is similar to the related *Haaniella* Kirby. This species only appears to have been mentioned a few times since the original description (Kirby, 1904: 398; Redtenbacher, 1906: 164, pl. 6.8 & 6.9).

Eggs

The eggs are black in colour and oval in shape. They resemble, but are slightly smaller than, the eggs of *Acrophylla wuelfingi* (Redtenbacher). They are laid on or in the earth like *Heteropteryx dilatata* (Parkinson) or *Eurycantha calcarata* Lucas. Incubation lasts a minimum of five months at ambient temperature.

1st Instar

On hatching, the body measures 21mm. The antennae are quite long and make a total length of 29mm. The body is green and grey and is smooth. The insect is not very mobile.

2nd Instar

From the second instar it is possible to distinguish the sexes: the male has a pronounced, bulging subgenital plate. The body is still smooth and looks shiny. The female has two pairs of white projections on the top of the thorax between the anterior and median pairs of legs. From this stage onwards the body has little spines. It is less shiny than that of the male. The dimensions of the insects are still identical in both sexes. The body measures 27mm long (36mm with the antennae) and 2.5mm thick.

3rd Instar

The body of the male measures 33mm (46mm overall), the female 38mm (51mm). The white projections are replaced by white bands with spines on. The body is 3mm thick.

4th Instar

Spines are now visible on the male, in particular on the head. The body measures 40mm with a total length of 55mm, the thickness is 4mm. The female has lots of spines. The total length is 60mm, and the body measures 45mm with a thickness of 5mm.

5th Instar

The white bands on the thorax of the female are more important. In the male, the body measures 47mm, total length 70mm and thickness 5mm. In the female, 50mm, 75mm and 7mm respectively.

6th Instar

The wings are visible in both sexes but are very small. The insect is very spiny, the male having the bigger spines. The dimensions of the male are: body 60mm, total length 84mm, thickness 6mm. In the female: body 63mm, total length 88mm, thickness 9mm.

7th Instar

The insects of both sexes are now adult. They are very handsome, the spines are white at the base

and red at the tips.

The male

The body is shiny black, the insect is very fine, the thickest part of the body (7mm) being at wing level. He has four toothed spines, 3mm long, on his head and also six smaller ones. The thorax is also very spiny. The abdomen has smaller spines between all segments. The wings are very small (4mm) and white with black veins in the visible parts. The folded away parts are bright red with black veins. The body measures 65mm and the total length is 110mm. The antennae are black and white.

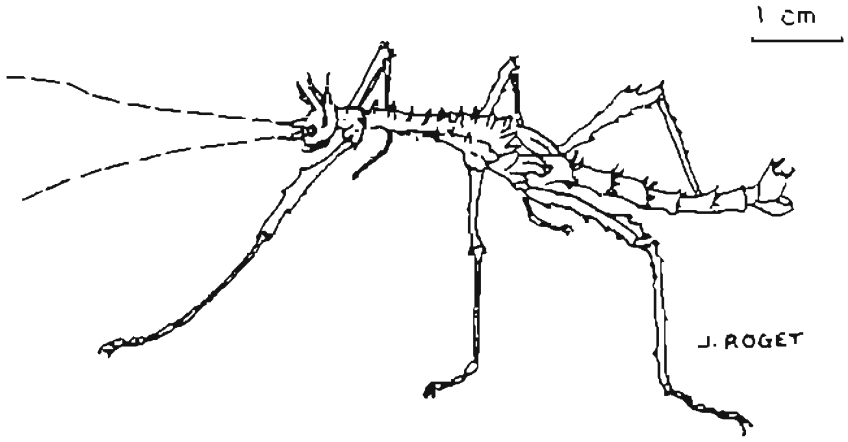

Figure 1. Male *Parectatosoma hystrix*.

The female

She is much more thickset. The body measures 75mm with a thickness of 10mm; the total length is 120mm. The spines are thicker and more numerous than in the male, the head bears a dozen spines. The effect of the body is not shiny like that of the male. The wings are very small (about 10mm), the colouring being the same as those of the males'. The 50mm antennae are black and white.

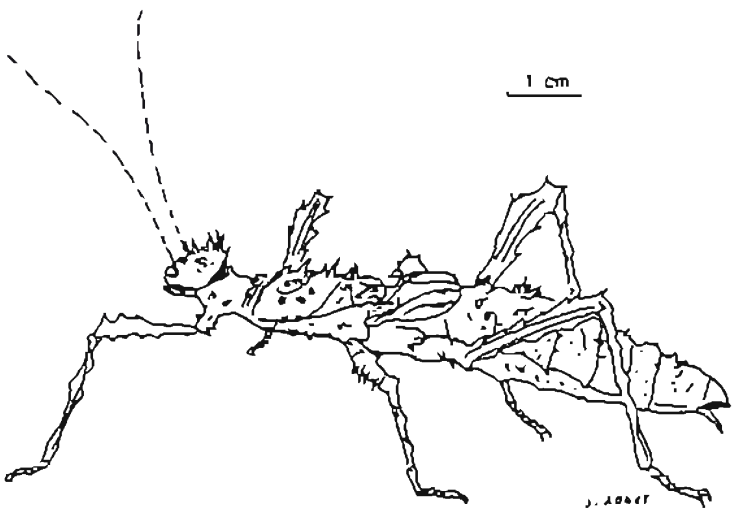

Figure 2. Female *Parectatosoma hystrix*.

The end of the abdomen resembles that of *Heteropteryx dilatata* with a "gutter" which facilitates laying eggs on or in the ground. About a month after the final skin-shed, the abdomen becomes very fat (diameter about 15mm) and laying begins. Coupling can last a long time (several hours) and the female can often be seen carrying the male on her back.

Behaviour

Both sexes, when disturbed, show the distinctive mannerism of unfolding their wings several times very violently and rapidly. This has the effect of producing a rustling or hissing sound (with a frequency of up to seven beats per second) and showing the bright red colour of the folded part of the wings. A similar phenomenon can be seen in *H. dilatata* and *Haaniella* spp.

Development

Development takes about three months and the adults live in excess of three months.

INSTAR	DURATION (days)
1st	20
2nd	15
3rd	13
4th	13
5th	16
6th	18

Culturing

This phasmid feeds on bramble at all stages. Little space is needed. Small boxes suffice for early stages. Adults can be put into a large cage. Nymphal mortality is not significant. The eggs are best kept in compost which is kept damp, at a temperature of about 23°C. The success rate of hatching is more or less 80%. For the hatchlings the temperature should be about the same with a relative humidity of 60-80%.

References

Kirby, F.W. (1904) *A synonymic catalogue of Orthoptera*. Volume 1. British Museum (Natural History), London.

Redtenbacher, J. (1906) *Die Insektenfamilie der Phasmiden*, Volume 1. Leipzig.

Wood-Mason, J. (1879) Preliminary notice of a new Genus (*Parectatosoma*) of Phasmidae from Madagascar, with brief descriptions of its two species. *Journal of the Asiatic Society of Bengal*, 48: 117-118.